#22 Brief

In the United States Patent and Trademark Office

Board of Patent Appeals and Interferences

Scott E. Johnston, Applicant Pro Se, Appellant

Appeal From Final Rejection of

James F. Hook, USPTO / GAU 3752, Primary Examiner

Appn. Number: 09/312,992

APPELLANTS' BRIEF

REAL PARTY IN INTEREST

The real party interest is listed above (Scott E. Johnston).

RELATED APPEALS AND INTERFERENCES

Not Applicable

STATUS OF CLAIMS

Claims 1-9 are pending in the application. Claims 1-9 are rejected.

This is an appeal from the final rejection of claims 1-9, all the claims in the application.

STATUS OF AMENDMENTS

Not Applicable - No amendments have been filed subsequent to final rejection.

SUMMARY OF INVENTION

A large diameter spirally formed pipe, having a diameter larger than similar pipe produced in the past. This pipe is round or may be reshaped into an arch shape. As a round pipe the invention includes spirally formed pipes above 15 feet in diameter, and as a round pipe reshaped into an arch shape, the invention includes, spirally formed pipes above 144 inches in diameter before being reshaped into an arch shape. This large diameter spirally formed pipe allows for the manufacture of products that have been traditionally produced by other means. (Appellant's Abstract of the Disclosure)

FIG. 2 of the appellant's drawings provides a schematic representation of the pipe generally designated 10. Page 3 of the specification lines 16-27 provides details of construction as follows: The pipe is composed of an elongated strip of ductile material, such as galvanized steel, which is formed into adjacent, helical convolutions. As illustrated, convolutions 14 are joined at 12. Convolutions 14 form the wall of the pipe which may be smooth, corrugated or profiled. Section view FIG. 5. illustrates the variety of pipe wall styles. The smooth wall 16 is joined by a welded seam 15, the corrugated wall 18 is joined by a conventional double lock seam 17, and the profiled wall 22 is joined by a conventional double lock seam 21. As the pipe diameter is increased, the thickness of material and size of corrugation or profile is typically also increased. So then, in most cases the dimensional proportions of the smooth, corrugated and profiled wall increases as pipe size is increased, although if desired can be held to a smaller size for some applications.

The pipe 10 may be round as shown in FIG. 3, or reshaped into an arch shape as shown in FIG. 4. A pipe according to the invention is larger than 15 feet in diameter when left in the round shape, and a pipe according to the invention is larger than 144 inches in diameter if it is then reshaped into an arch shape.

Page 1 and 2 of the specification provides background for the invention. The fact that large diameter pipe and arch shapes have been produced from bolted or welded together sections of material is discussed. That these products require a crew of skilled workers, a large lifting device, and considerable time to assemble.

Under the detailed description of the invention on Pages 2 and 3 many of the new uses for spirally formed pipe are discussed. Referring to FIG. 1, highway overpasses 52, barns or storage buildings 37, homes 45, grain silos 32, water tanks 61 are shown along with traditional uses such as storm drain 21, and pile pipe or shell 67. It is stated on page 3 lines 12-15, Traditional uses such as highway storm drain 21 and pile pipe or shell 67 are well known uses for spirally formed pipe, while overpasses 52, storage buildings 37, homes 45, silos 32 and water tanks 61 being larger in diameter, have generally been produced from formed metal panels with bolted or welded construction.

Page 2 lines 9-15 disclose that the appellant has developed new machinery for producing "Large Diameter Spirally Formed Pipes", and Large Diameter Arching Machinery" capable of producing Large Arches. The Portable Spiral Pipe Machinery and the Arching Machinery are both now patented, (U.S. Patent No. 6,000,261 and 6,260,403). This illustrates that invention was required to produce the claimed "Large Diameter Spirally Formed Pipe".

ISSUES

1.) Whether claims 1 and 2 are unpatentable under 35 U.S.C. § 102(b) over "Reed".

2.) Whether claims 1, 2 and 4 are unpatentable under 35 U.S.C. § 102(b) over "McDonald".

3.) Whether claims 1, 2 and 4 are unpatentable under 35 U.S.C. § 102(b) over "Steuber".

4.) Whether claim 3 is unpatentable under 35 U.S.C. § 103(a) over "Reed, McDonald and Steuber" in view of the "Handbook of Steel Drainage and Construction Products".

5.) Whether claims 1, 2 and 4 are unpatentable under 35 U.S.C. § 103(a) over "PRD Cortec Housing Manufacturing System" in view of "McFatter".

6.) Whether claims 5-9 are unpatentable under 35 U.S.C. § 103(a) over "PRD Cortec Housing Manufacturing System" in view of the "Handbook of Steel Drainage and Construction Products".

7.) Whether claims 5-9 are unpatentable under 35 U.S.C. § 103(a) over the "Handbook of Steel Drainage and Construction Products" in view of "PRD Cortec Housing Manufacturing System".

8.) Whether claims 1-9 are unpatentable under 35 U.S.C. § 103(a) over the "Handbook of Steel Drainage and Construction Products" in view of "McFatter".

GROUPING OF CLAIMS

The appellant is concerned that the selection of a claim to represent a group of claims be applied to independent (base claims) claims only. The examiner has rejected claims 1, 2 and 4 under 35 U.S.C. § 102(b) and therefore it seems that claim 1 should be reviewed to determine if, in

fact, the invention as claimed is actually anticipated. For the rejections of claims under 35 U.S.C. § 103, the examiner has rejected claim 3, claims 1, 2 and 4, claims 5-9 and claims 1-9. For the rejections of claim 3, and claims 1, 2 and 4 under 35 U.S.C. § 103, claim 1 should be relied upon. For the rejection of claims 5-9 under 35 U.S.C. § 103, claims 5 and 9 should be reviewed to determine if the rejections apply to both. For the rejection of claims 1-9, claims 1, 5 and 9 should be reviewed. These base claims potentially identify significant variations of the claimed invention that could be used to distinguish the invention from the prior art.

ARGUMENT REGARDING ISSUE 1.

Whether claims 1 and 2 are unpatentable under 35 U.S.C. § 102(b) over "Reed".

1. The Reed reference is titled "Method and Apparatus for Erecting Helical Storage Vessel". The reference provides text and illustrations to support the "Method and Apparatus" claims. In the process of describing the invention there are details presented regarding the article produced by the invention. The article may or may not be fully disclosed. It is, however, apparent that the article is considered to be a "Silo". Page 1 column 2, lines 38-41 of the reference states "The silo as shown in the drawings comprises a generally cylindrical body portion which is enclosed at the top by a roof member 2, and supported beneath grade level by an annular footing 3". The silo disclosed by the reference consists of numerous components which are integral to the structure. The removal of items and use of a portion of the silo as a pipe is not taught by the reference.

It is readily apparent that a silo is physically different than a pipe. Del. 1989. Any degree of physical difference between inventions, however slight, invalidates claims of anticipation in a patent infringement action. E.I. du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc., 706 F.Supp. 1135, affirmed 887 F.2d 1095, rehearing denied. The examiner's rejection implies that the "silo" is (obviously) a pipe, regardless of physical differences. The MPEP, states that "The distinction between rejections based on 35 U.S.C. § 102 and those based on 35 U.S.C. § 103 should be kept in mind. Under the former (35 U.S.C. § 102) the claim is anticipated by the reference. No question of obviousness is present. In other words, for anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." While the examiner does not use the word "obvious", it is clear that the examiner believes using a silo as a pipe would occur to anyone familiar with the subject. "The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to anyone familiar with the subject; * * *." Potts and Co. v. Creager et al.,70 O.G. 494; C.D. 1895, 143; U.S. An invention will not be denied a patent because it embodies a solution which seems simple and obvious with the benefit of hindsight. SAF-GARD Products, Inc. v. SERVICE PARTS, Inc. 532 F.2d 1266 (1976) The examiner's rejection implies that the "silo" is obviously a pipe, which is the result of hindsight reasoning, which is not allowed under 35 U.S.C. § 102. The decision of the examiner must be reversed, which action the appellant now respectfully requests.

2. If the examiner believes that the silo presented in the reference is inherently a pipe, it is the responsibility of the examiner to prove it. *Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.* The examiner must provide some *evidence* or *scientific reasoning* to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Swinehart, 439 F.2d 210, 213, 169 USPQ 226, 229 (CCPA 1971) The examiner has not provided evidence or scientific reasoning to support inherency. There are, however, several statements found within the examiner's final office action which may be intended to provide such evidence or scientific reasoning that will be analyzed next.

3. The examiner's final office action dated February 24, 2003 (from now on referred to as "final rejection") states "silos allow for input of material at the top and removal of the material at the bottom, thereby providing a flow of material from top to bottom", however, this is not taught in the reference. The top portion of the silo does not illustrate a hole, or access means to introduce material, and on page 1 column 2, lines 56-58, states, "A suitable conveyor unit, not shown, may be disposed within trough 9 and serves to convey the cut silage within trough 9 to the exterior of the silo". These observations suggest, that the silo does not function in the manner suggested by the examiner. Also, if we were to accept that silos allow the "input of material at the top and removal of the material at the bottom", it is doubtful that those skilled in the art would reach the

conclusion that material is therefore flowing from top to bottom in the same manner that material or fluid is expected to flow through pipe. The examiner's suggestion is not based on a teaching within the reference, so it must be viewed in context with what those skilled in the art would believe the function of a silo to be. The reference has as part of it's title the term "Helical Storage Vessel" and then goes on to further define the storage vessel as a silo. It is therefore apparent that the intended purpose of a silo is for storage of some material, not for conveyance or flow. To those skilled in the art, "storage" would imply the retention of material for some period of time, and that the removal of that material would take place at a later date. A barn structure is used for storage, and may be filled from one side and then emptied from the other, it would nevertheless remain a barn structure. In either case, the use of the term "flow" would not be a normal use of the term. It would not be a concept considered by those skilled in the art. The examiner's reasoning is, in fact, abstract reasoning, not scientific reasoning. It should also be noted that the examiner's statement is incomplete, it does not suggest how the statement applies to the appellants' invention. No discussion is presented defining the inherent characteristics of the articles.

4. The examiner's final rejection, page 7, lines 1-4, implies that the body portion of the "silo" is a pipe as claimed by the applicant, that any of the additional components that make up a silo are irrelevant. This raises the question; why would you see a pipe, when looking at a grain silo? The reference of Reed does not suggest it. In fact, *none* of the three silo related patents cited by the examiner suggest that a "silo" may be used as a pipe. However, if you set out to specifically

look for a Large Diameter Spirally Formed Pipe as claimed by the appellant, and you found these "silo" patents you might believe you are looking at a spirally formed pipe, particularly when you consider that the appellants' application lines 8-9 states that "Large Diameter Spirally Formed Pipe may be placed vertically and used as a grain silo 32", and looking at the illustration in Fig 1 item 32, it clearly shows a silo. You need only look at the applicant's disclosure to see this silo as a pipe. Of course, this is hindsight reasoning, which is not allowed under 35 U.S.C. § 102(b). When a reference does not render an invention obvious under 35 U.S.C. § 103(a), it can not possibly anticipate the invention under 35 U.S.C. § 102(b). The patent of Reed would require physical modifications as well as modifications to the teachings of the reference to make the appellants' claimed invention. *If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.* In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). A "silo" modified into a pipe would no longer function as a "silo".

5. The examiner's final rejection, page 7, goes on to assert that a number of words are known in the art to be interchangeable and cites an addition of Webster's Dictionary as the authority for his position. This reasoning fails to consider that the purpose of a dictionary is *not* to define words as they are used in the art, but is, in fact, used to explore all of the meanings of a word. It is, the appellants' position that the term "Spirally formed pipe" as used in claim 1, has specific meaning in the art. It is not known as "tubular object". Contractors do not order 100 feet of tubular object. Pipe manufactures do not produce various sizes of tubular object. Hose is used to water a lawn, and circulate water in an automobile. Conduit is used to protect wiring, and duct is used in air

conditioning applications, and so on. These examples are not all inclusive, but they do illustrate that these words would not be considered interchangeable by those skilled in the art. Typically, when you find these types of words being used interchangeably it is by those that are not skilled in the art, such as sales persons, teachers, etc. The examiner also made assertions that all of these tubular objects may have closed ends, suggesting they may be capped, plugged or have "man hole covers that close the end of a sewer pipe". These examples of closed ends, are known in the art as fittings and accessories, they are not a part of the pipe. Man hole covers are normally a circular steel plate placed on top a cylindrical concrete structure to provide access along a sewer or storm drain line for maintenance. The examiner was apparently attempting to suggest that pipe somehow has an inherent ability to have a top and bottom structure as would be required to make a silo, but again no discussion is presented defining the inherent characteristics of the products.

6. Next, the examiner's final rejection, last line on page 7, and lines 1-4 on page 8, dismisses an argument presented by the appellant identifying an inherent characteristic of pipe. Pipe is inherently round. It is "self supporting" in a round shape. The suggestion that there are many pipes in use for tunnels that require support structure, is similar to the man hole cover assertion discussed above. It is not an accurate presentation. Tunnels are not pipes. There are many types of tunnels, many of them are arch shapes that look like pipe, most are concrete engineered structures and there are some tunnels that are made from pipes. Pipes are used to produce some tunnels because they are self supporting, and may be installed quickly. The assertions regarding the orientation of a pipe, and directing that such is not a limitation of the claim, underscores

that the examiner is not following the concept that the appellant has presented an inherent characteristic of pipe. In general, the examiner's arguments focus on the pipe, rather than explaining how a silo could inherently be a pipe. It is not the appellants' responsibility to provide the evidence or scientific reasoning regarding inherency. It is inappropriate for the examiner to shift this responsibility to the appellant. Simply providing answers to the appellants' arguments, does not absolve the examiner, of the examiner's responsibilities.

7. The examiner's final rejection, page 8, lines 11-17, address the appellants' assertion that the new invention of Large Diameter Spirally Formed Pipe provides for unappreciated advantages over the prior art. The examiners' response implies, that the argument must somehow be "directed to a method", and dismisses the argument as being irrelevant. An argument presented regarding unappreciated advantages, is normally accepted as evidence that the invention is both novel and unobvious. It is difficult to understand why the examiner would dismiss such an argument as irrelevant, particularly when you consider it is one of the few arguments that the MPEP advises examiners not to neglect addressing. *In re Herrmann, 261 F.2d 598, 120 USPQ 182 (CCPA 1958)* the court noted that since the applicant's statement of advantages was not questioned by the examiner or the Board of Appeals, it was constrained to accept the statement on face value and therefore found certain claims to be allowable. See also In re Soni, 54 F.3d 746, 751, 34 USPQ2d 1684, 1688 (Fed Cir. 1995). The appellants' spirally formed pipe, could be produced and tilted up to create a grain silo in a fraction of the time these silo references require.

8. Next, the examiner's final rejection, last paragraph, page 8 and lines 1-4 of page 9, addresses the appellants' argument that Large Diameter Spirally Formed Pipe solves *unrecognized problems*, and again the examiner has apparently missed the argument. As with the advantage argument, an argument presented regarding *unrecognized problems*, is normally accepted as evidence that the invention is both novel and unobvious. It has nothing to do with claim language and intended use as the examiner has suggested. It is unrealistic to think that a grain silo anticipates the appellants' pipe, when there is no suggestion that a silo could be utilized to solve the same problems as solved by that pipe. This actually illustrates that the "Silo" reference of Reed does not function in the same way to produce the same results as the appellants' invention. CI.Ct. 1986. Anticipation or lack of novelty under patent law is established only when a single prior art reference expressly describes or inherently contains each element of claimed invention, functioning in substantially the same way to produce substantially the same result. 35 USC § 102(a) Pacific Technica Corp. v. U.S., 11 CI.Ct. 393, affirmed in part and vacated in part 835 F.2d 871.

9. The examiner's final rejection page 9, lines 5-9, dismisses the appellants' argument regarding lack of implementation. The examiner's rejection is based on 35 USC § 102. It is implied, that the reference possesses *inherent characteristics* that make it's use as a pipe inevitable, hence, a certainty, therefore anticipated. The fact that the Reed patent was filed 50 years ago, and no one, as yet has done what the examiner has implied is anticipated certainly brings into question the validity of such an assertion.

10. Continuing, with the examiner's final rejection page 9, lines 10-14, the examiner is addressing an argument presented by the appellant, suggesting that the Reed reference *teaches away* from the suggested anticipation in that the reference is individually complete. The examiner's response is unclear, defining multiple uses for the words pipe and tube as found within a dictionary and implying this enables the reference to teach all of the claimed structure. The appellants' argument is focused not just on the fact that this reference does not anticipate, but also does not render obvious the claimed invention. The Reed reference is complete. It fully develops details of equipment designed to manufacture a silo structure and illustrates a silo in enough detail to understand the intended use of the invention. There is no suggestion of additional uses, and there is no suggestion that the reference should be modified.

11. Next, the examiners' final rejection page 9 last paragraph, deals with the appellants' assertion that you may not pick and choose elements from the article disclosed in the reference and prove anticipation. The examiner discounts the Board of Appeals quotation relied on, as it relates to this rejection since the reference involved contained different embodiments. The appellant only quoted one sentence from Page 4 of the Board of Appeals decision. To clarify, the entire second paragraph of page 4 would apply. The suggestion that the cites and authorities presented would only apply to references which contain different embodiments is not supported. It is essential that all of the elements and limitations of the claim must be shown in a single prior art reference, arranged as in the claim. The fact a "silo" contains multiple elements that are not found within the claim language, prevents the "silo" from having all of the elements arranged as in the claim.

There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Contractors do not order 100 feet of silo. Pipe manufactures do not produce 100 feet of silo. Silo manufactures do not produce 100 feet of silo and sell it as pipe. A person of ordinary skill in the art would not view a silo as a pipe, regardless of dictionary definitions that allow phone calls to be piped around the world and ants to flow out of their hills.

12. The examiner's final rejection page 10, lines 2-7, provides a lesson in general engineering principles, and then discounts the appellants' argument as "merely speculation". It is, in fact, the examiner's argument that is based on speculation and is unsupported by the prior art. If, as the examiner suggested, the vertical support members as found on some of the silos were intended to provided stability due to the silo's higher center of gravity, all of the silo references would likely need the same support. Also, the supports would likely need to be more of a gusset and stanchion type design to increase the overall footprint of the silo structure. It is unlikely that this type of support would extend vertically beyond the height of actual benefit provided by such a support, and yet, these supports are generally found extending to the top of the silo. Considering the basic structural characteristics of a silo, manufactures have likely developed some ratio of height to diameter to provide for overall stability. For taller silos there may also be some depth at which they should be installed in the ground. The need for external supports can actually be understood by looking at a simple above ground swimming pool. While an above ground swimming pool is not a silo, it does function in a similar manner to retain it's contents. It is also a structure that is familiar to most people. Above ground pools are generally made with a thin sheet metal wall, the

wall of the pool is flimsy or floppy without vertical supports, the supports hold the wall in place, and helps to retain the contents of the pool. Less expensive pools are available that do not have the vertical supports, a ring of sheet metal, or plastic three to four feet high serves as the wall. This ring is placed on edge on level ground, again the wall is flimsy or floppy, but in this case sand is used pushing from within to hold the base in a circular shape, the wall remains flimsy until the pool is filled with water. The wall thickness of a silo is designed to provide sufficient strength to retain it's contents, the wall stands on edge and is retained in a circular shape by a foundation, and top structure, some silos are also provided with vertical members to tie the structure together, thereby increasing it's strength. This is not a theory based on speculation, the reference of "Reed" provides support for this assertion, Page 3 column 6, lines 54-56, in discussing the silo wall states; "Each of the sheets is designed with a thickness to withstand the internal pressure of the silage at the particular position in the silo at which the same is disposed".

13. The examiner's final rejection, page 10, lines 8-14, is the last response pertaining to issue 1. The argument was a final attempt to persuade the examiner of the examiner's responsibility to provide some evidence or scientific reasoning to support his position. The examiner again dismisses the appellants' assertion that pipe has inherent characteristics not shared by the silo of Reed, suggesting that Websters Dictionary provides all the authority needed to demonstrate that silo is pipe. As discussed before, the purpose of a dictionary is *not* to define words as they are used in the art, but is, in fact, used to explore all of the meanings of a word. The examiner has not yet provided evidence or scientific reasoning to support his position.

14. The examiner did not establish that **"tubular object"** is equal to **"spirally formed pipe"**, and even if it had been possible to do so, the examiner would still need to develop that there is a "silo" to "pipe" transition disclosed, or available to those skilled in the art, that would enable them to make the claimed invention. Without providing this, the examiner is actually suggesting that the body portion of the silo is *obviously* a pipe, which is not allowed under 35 USC § 102. The examiner must go beyond merely presenting a theory, to support inherency. It must be demonstrated that one of ordinary skill in the art would be enabled to make the claimed invention. D.Del. 1990. Even if a prior printed publication discloses the claimed invention, it will not suffice as prior art if it was not enabling; therefore, defendant must show that each element of claim in issue is found in the prior patent or publication, either expressly or under the principles of inherency, and that one of ordinary skill in the art could have combined the publication's description of invention with his own knowledge to make the claimed invention. 35 U.S.C. § 102(b). General Elec. Co. v. Hoechst Celanese Corp., 740 F.Supp. 305.

Based on arguments 1-14 above, including cites and authorities, the decision of the examiner must be reversed; which action the appellant now respectfully requests.

ARGUMENT REGARDING ISSUE 2.

Whether claims 1, 2 and 4 are unpatentable under 35 U.S.C. § 102(b) over "McDonald".

15. The McDonald reference is titled "Method of Making a Circular Building Structure". The reference provides text and illustrations to support the "Method" claims. In the process of describing the invention, there are details presented regarding the article produced by the invention. The article is not fully disclosed. It is, however, apparent that the article is considered to be a "Silo". Page 1 column 1, the first sentence states "This relates to building structures and more particularly to silos used for the storage of corn and grain, and to the method of manufacturing silos". The silo disclosed by the reference consists of numerous components which are integral to the structure. The removal of items and use of a portion of the silo as a pipe is not taught by the reference. It is readily apparent that a silo is physically different than a pipe. Del. 1989. Any degree of physical difference between inventions, however slight, invalidates claims of anticipation in a patent infringement action. E.I. du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc., 706 F.Supp. 1135, affirmed 887 F.2d 1095, rehearing denied. The examiner's rejection implies that the "silo" is (obviously) a pipe, regardless of physical differences. The MPEP, states that "The distinction between rejections based on 35 U.S.C. § 102 and those based on 35 U.S.C. § 103 should be kept in mind. Under the former (35 U.S.C. § 102) the claim is anticipated by the reference. No question of obviousness is present. In other words, for anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." While the examiner does not use the word "obvious", it is clear that the examiner believes using a silo as a pipe would occur to anyone familiar with the subject. "The apparent simplicity of a new device often leads an inexperienced person to think that it would have

occurred to anyone familiar with the subject; * * *." Potts and Co. v. Creager et al.,70 O.G. 494; C.D. 1895, 143; U.S. An invention will not be denied a patent because it embodies a solution which seems simple and obvious with the benefit of hindsight. SAF-GARD Products, Inc. v. SERVICE PARTS, Inc. 532 F.2d 1266 (1976) The examiner's rejection implies that the "silo" is obviously a pipe, which is the result of hindsight reasoning, which is not allowed under 35 U.S.C. § 102. The decision of the examiner must be reversed, which action the appellant now respectfully requests.

16. If the examiner believes that the silo presented in the reference is inherently a pipe, it is the responsibility of the examiner to prove it. *Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.* The examiner must provide some *evidence* or *scientific reasoning* to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Swinehart, 439 F.2d 210, 213, 169 USPQ 226, 229 (CCPA 1971) The examiner has not provided evidence or scientific reasoning to support inherency.

17. The examiner's final rejection, page 8, second paragraph identifies that all of the arguments "are essentially repeated arguments that were used against Reed above", no additional argument is presented by the examiner. Therefore, all of the above reasons as presented in arguments 1-17, including cites and authorities, apply to the McDonald reference as well. The decision of the examiner must be reversed, which action the appellant now respectfully requests.

ARGUMENT REGARDING ISSUE 3.

Whether claims 1, 2 and 4 are unpatentable under 35 U.S.C. § 102(b) over "Steuber".

18. The Steuber reference is titled "Multiple Storage Tank Fabrication Procedure". The reference provides text and illustrations to support the "Method" claims. In the process of describing the invention there are details presented regarding the article produced by the invention. The article is not fully disclosed. It is, however, apparent that the article is considered to be a "Storage Tank". The tank disclosed by the reference consists of numerous components which are integral to the structure. The removal of items and use of a portion of the tank as a pipe is not taught by the reference. It is readily apparent that a tank is physically different than a pipe. Del. 1989. Any degree of physical difference between inventions, however slight, invalidates claims of anticipation in a patent infringement action. E.I. du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc., 706 F.Supp. 1135, affirmed 887 F.2d 1095, rehearing denied. The examiner's rejection implies that the tank is (obviously) a pipe, regardless of physical differences. The MPEP, states that "The distinction between rejections based on 35 U.S.C. § 102 and those based on 35 U.S.C. § 103 should be kept in mind. Under the former (35 U.S.C. § 102) the claim is anticipated by the reference. No question of obviousness is present. In other words, for anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." While the examiner does not use the word "obvious", it is clear that the examiner

believes using a tank as a pipe would occur to anyone familiar with the subject. "The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to anyone familiar with the subject; * * *." Potts and Co. v. Creager et al.,70 O.G. 494; C.D. 1895, 143; U.S. An invention will not be denied a patent because it embodies a solution which seems simple and obvious with the benefit of hindsight. SAF-GARD Products, Inc. v. SERVICE PARTS, Inc. 532 F.2d 1266 (1976) The examiner's rejection implies that the "tank" is obviously a pipe, which is the result of hindsight reasoning, which is not allowed under 35 U.S.C. § 102. The decision of the examiner must be reversed, which action the appellant now respectfully requests.

19. If the examiner believes that the tank presented in the reference is inherently a pipe, it is the responsibility of the examiner to prove it. *Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.* The examiner must provide some *evidence* or *scientific reasoning* to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Swinehart, 439 F.2d 210, 213, 169 USPQ 226, 229 (CCPA 1971) The examiner has not provided evidence or scientific reasoning to support inherency.

20. The examiner's final rejection, page 8, third paragraph identifies that all of the arguments "are essentially repeated arguments that were used against Reed above", no additional argument is presented by the examiner. Therefore, all of the above reasons as presented in arguments 1-20,

including cites and authorities, apply to the Steuber reference as well. The decision of the examiner must be reversed; which action the appellant now respectfully requests.

ARGUMENT REGARDING ISSUE 4.

Whether claim 3 is unpatentable under 35 U.S.C. § 103(a) over "Reed, McDonald and Steuber" in view of the "Handbook of Steel Drainage and Construction Products".

21. The references of Reed, McDonald and Steuber pertain to the manufacture of "tanks" and "silos" as discussed above. None of the references actually teach of a "spirally formed pipe" as would be required to meet the appellants' claims. Arguments 1-21 above illustrate this fact. The examiner's rejection is contingent upon the earlier "Reed, McDonald and Steuber" rejections being valid, therefore the rejection is not valid. The decision of the examiner must be reversed.

22. The "Handbook of Steel Drainage and Construction Products" (from now on referred to as the "Handbook") reference is a manual developed by the American Iron and Steel Institute, it provides information about many products including "Spirally Formed Pipe". The largest diameter spirally formed pipe disclosed by the reference is 120 inches. On page 40, the reference provides information regarding corrugation profiles used for various types and sizes of pipe. There is, however, a distinction made between large diameter products above 120 inches. Beyond

the 120 inch size there is no further variation in corrugation sizes, all sizes above 120 inch utilize the 6 inch x 2 inch corrugation profile. The modifying reference of the "Handbook" does not teach of variation in corrugation profiles for pipes above 120 inches in diameter, all profiles are the same beyond this size, therefore the rejection is not valid. The Handbook reference does not teach what the examiner has relied upon it as teaching.

23. The examiner's final rejection, page 10, last paragraph, dismisses the appellants' assertions regarding modifying the Reed, McDonald and Steuber references prior to applying the Handbook reference, but the fact is, the combined references cannot teach the invention of claim 3 without first being modified to meet claims 1 and 2. The examiner's rejection is based on the Reed, McDonald and Steuber disclosing the appellants' invention of claim 1 and 2, when such has not been established, therefore it is necessary for the examiner to explain this modification as well as any subsequent modifications.

24. Next the examiner's final rejection, page 11, first paragraph, suggests a potential motivation for utilizing the Handbook reference to modify the teachings of Reed, McDonald and Steuber. The examiner states "If faced with a problem related to the size of a strip", without identifying what the nature of the problem might be, how it might be known to those skilled in the art. There is no attempt to connect the statement to some teaching found within any of the references. The suggested motivation is simply not supported and no presentation has been made to establish an expectation of success relative to such modification. The examiner also discounts the appellants'

assertions that the references teach away from the suggested modifications, when it is relatively obvious that they do. Not only do the references of Reed, McDonald and Steuber teach of structures up to 31 feet in diameter, without the needed modification, but the Handbook reference teaches of pipes beyond 21 feet in diameter made from structural plates that are bolted together, all made with the 6 inch x 2 inch corrugation profile. It is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp,* 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem from some teaching, suggestion, or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F. 2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.) cert. denied, 488 U.S. 825 (1988). The examiner's reasoning just, does not, add up, there is no basis for this rejection under 35 U.S.C. § 103(a). The examiner must not only provide some suggestion of the desirability of doing what the inventor has done, but must also present that there would be a reasonable expectation of success. See MPEP -- SECTION-- 706.02 "the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure". In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The examiner has not provided a suggestion of the desirability of doing what the inventor has done, along with a presentation that there would be a reasonable expectation of success. The decision of the examiner must be reversed; which action the appellant now respectfully requests.

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ARGUMENT REGARDING ISSUE 5.

Whether claims 1, 2 and 4 are unpatentable under 35 U.S.C. § 103(a) over "PRD Cortec Housing Manufacturing System" in view of "McFatter".

25. The PRD Cortec Housing Manufacturing System (from now referred to as "Cortec") is a sales flyer developed by one of the appellant's former employers. It anticipates spirally formed pipes up to 15 feet in diameter for building houses. It is, in fact, the reason why the appellant's invention claims round pipes above 15 feet. The appellant is not aware of any spiral pipes actually made above 12 feet, and does not believe that any sales were realized as a result of this flyer. The modifying reference of McFatter, is an apparatus patent titled, "Storage Tank Construction Procedures". It refers to the McDonald patent, column 1, lines 13-15, as an example of "one such method of producing a storage tank". Upon closer examination of the reference it is apparent that the invention of McFatter offers a new weld seam, and an alternate top structure for the tank. A completed tank structure is not disclosed and the overall purpose of the patent is focused on the apparatus claimed. Both references are *individually complete.* The Cortec flyer teaches of a house structure produced from spirally formed pipe, and the McFatter patent teaches of an apparatus to produce storage tanks. Neither reference provides a teaching to combine the references, it is therefore an *unsuggested combination.* It is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex*

parte Clapp, 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F. 2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.) cert. denied, 488 U.S. 825 (1988). The motivation suggested by the examiner is not found within the references, and the teaching would not be logical to those skilled in the art.

26. In the examiner's final rejection, page 11, last paragraph, the examiner points out that this reference refers to pipes as tubes and that they are therefore equivalent. It is not the appellants' position that the word tube can not refer to pipe. It is, however, a fact that *"tubular object"* is not equal to tube or pipe. The word tube is a broad term used to identify many things, while the term pipe as used in the claim language is a much narrower term particularly as it would be viewed by those skilled in the art. The examiner states "McFatter discloses a device, such as a mill", where the term "mill" is not used in the McFatter reference. The term is used in the Cortec reference. Pipe manufacturing equipment is often referred to as pipe mills, but it is important to note that the term "mill", itself is another widely used term that can refer to many things. For example, there are carpet mills, rolling mills, and vertical mills, yet none of these are equal. The last sentence, then continuing on to page 12, the examiner implies that McFatter teaches that "mills" such as Cortec are capable of forming pipes up to 31 feet in diameter. The McFatter patent teaches in some detail how tanks are produced with the McFatter apparatus, there is no teaching in the reference regarding Cortec, or the products, that a Cortec mill is said to produce. Additionally, the Cortec reference does not disclose how the Cortec products are produced.

The examiner has not developed a logical basis to arrive at the examiner's conclusion, the examiner has not provided a comparison of the two processes.

27. Next, the examiner's final rejection, page 12, lines 1-2, implies that both references are concerned with the same type cylindrical or tubular objects, therefore the motivation to combine them exists. This implies that the motivation to combine references is based on shape alone, not from some teaching of the reference, or knowledge generally available to one of ordinary skill in the art, it simply has to look similar. The tank of McFatter is not even fully disclosed, and certainly there are many references that could be combined based on this type of reasoning. The appellant is aware, for example, that the core inside a roll of paper towels looks like a spirally formed pipe, but it would not suggest a motivation to combine the teachings.
As discussed above, "the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole, or from the knowledge generally available to one of ordinary skill in the art". The Federal Circuit states that "(the) mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggested the desirability of the modification". In re Fitch, 972 F.2d 1260, 1266 n.4, 23 USPQ2d 1780, 1783-84 n.4 (Fed. Cir. 1992), citing In re Gordon, 773 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

28. The examiner's final rejection, page 12, lines 3-13 deals with equivalents. The examiner states, "Both articles use the same methods and the same types of apparatus", when clearly there

is no basis for such a suggestion. As discussed before, the Cortec reference does not disclose how the Cortec products are produced. The appellant had suggested that Campbell is typical of the type of machine as would be used by Cortec, to illustrate to the examiner how different the methods and apparatus really are. *The appellant stands by that position.* The examiner has made no effort to research the spiral manufacturing processes, to compare those teachings with the teachings of McFatter, to determine if there is a fact based way to illustrate that these processes are equal. It is impossible for the examiner to support the teaching of equivalencies without providing authoritative support for that position. The rejection is based on nothing more than the examiner's own statement. A broad conclusory statement regarding the obviousness of modifying a reference, standing alone is not "evidence". E.g., McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993). "Mere denials and conclusory statements, however are not sufficient to establish a genuine issue of material fact."; In re Sichert 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977). It is interesting to note that the examiner's arguments in support of the suggested combination are based on the method and apparatus being equal, but at the end of the paragraph it is said that "the method is irrelevant when claims are drawn to an article and its structure". It is unclear what the examiner is trying to suggest by this statement. An article must of necessity be produced in some manner, and the method of production is directly connected to the ability to produce the article. The examiner is required to provide the requisite motivation to combine the references, and the motivation presented by the examiner has continually focused on the method of manufacture, so if such is irrelevant, this provides further support that there is no basis for the examiner's rejection.

29. Next, the examiner's final rejection, page 12, last paragraph, provides an argument directed toward the expectation of success required to support modification of the references. It is clear that the examiner's comments are not supported by any teaching found within the references, the examiner has developed a theory based on possibilities that the examiner has manufactured. For all of the above reasons, the decision of the examiner must be reversed, which action the appellant now respectfully requests.

ARGUMENT REGARDING ISSUE 6.

Whether claims 5-9 are unpatentable under 35 U.S.C. § 103(a) over "PRD Cortec Housing Manufacturing System" in view of the "Handbook of Steel Drainage and Construction Products".

30. The Cortec reference, as discussed before, is a sales flyer presenting a spirally formed pipe for use as a house up to a 15 foot diameter. The Handbook reference provides information about many products. It teaches of spirally formed pipes up to 120 inches, and it teaches of larger pipes up to 21 feet made from bolted together structural plate sections. The bolted plate sections are pre formed at the factory to include the curved sections necessary to produce an arch shape when bolted together. There is no motivation to combine the references beyond what the Handbook reference actually teaches. The Cortec reference would only gain the benefit of the arch shape up

to 120 inches, by the suggested combination. The combination of the references beyond this size, is an *unsuggested combination*. It is apparent that *unsuggested modifications* would be required for the combination to meet the appellants' claim language. It is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention.
See *Ex parte Clapp*, 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F. 2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.) cert. denied, 488 U.S. 825 (1988).

31. The examiner's final rejection, page 13, first paragraph, dismisses arguments pertaining to size and the Handbook reference as irrelevant, suggesting the Cortec reference provides the size limitation, that the "modifying reference need not teach other limitations already taught by the base reference". The appellant presented that the Handbook reference only teaches of arch pipes made from spirally formed pipes up to 120 inches in diameter, larger sizes of arch pipe are produced with bolted together structural plate sections, these are teachings of the reference.
In light of these teachings, and in the absence of any direct teaching about reshaping or flattening of pipes, it is improper to suggest it is obvious to reshape any size of spirally formed pipe. It can not be known, how this pipe became an arch pipe by the reference alone. The examiner has not provided a presentation to show how one of ordinary skill in the art produces an arch pipe, and how, that person would be motivated to use that knowledge to produce a larger size than the

equipment is designed to produce. As stated above, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp,* 227 USPQ 972, 973 (BPAI 1985). Arch shaped pipes are not naturally occurring. An article, must of necessity be produced in some manner, and the method of production is directly connected to the ability to produce the article. To produce an arched pipe as the appellant has claimed requires invention. Thomas Edison was awarded patent protection for his light bulb, but U.S. Electric Lighting Co., began to copy Edison, asserting that a prior French patent disclosed the Edison invention with the exception of using carbon for the filament. Edison claimed that the filament as claimed was not naturally occurring, that it required invention to produce. "It involves invention to reduce the size of a carbon element to a filament form in an electric lamp." Edison Electric Light Co. v. U.S. Electric Lighting Co., 52 Fed. Rep. 300.

32. Next, the examiner suggests a motivation that one could form the "same flat floor shown in Cortec", but the reference does not support this assertion. The floor is a vital part of the teaching of Cortec. It serves as a platform for pre assembled floor plans. It is clear, that for the floor to function as the reference suggests it must be of sufficient height to support the features and utilities described, and allow for it to be inserted into the pipe. An arch shape from a 15 foot diameter pipe, would be approximately 17 feet wide and 9 feet high. If the floor unit were only 2 feet high the ceiling would be 7 feet at the center, and below 6 feet just a few feet from the center. The *useful volume* is actually decreased when using the arch shape for the Cortec house

structure. Additionally, building codes generally require an 8 foot ceiling height for a structure to be legal. *If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.* In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir.1984) The Cortec reference would not function correctly for it's intended purpose, if modified as the examiner has suggested. The examiner also stated, "one skilled in the art would expect success based upon the Handbook teachings", but there are no teachings in the Handbook that could be relied on to demonstrate the reshaping of a 15 foot diameter pipe is possible, particularly when the Handbook does not provide any teachings regarding reshaping or flattening of pipe.

33. The examiner's final rejection, page 13 last paragraph, continuing on to page 14, states, "the arguments with respect to the Handbook are not persuasive", but the examiner never provides a focus to the argument. It is unclear what the examiner's point is. It is likely a response to the appellants' assertion that the references teach away from the suggested modification, but there is nothing in the examiner's statement, that conflicts with what the appellant has said. Larger sizes of arch pipe are made from bolted together structural plate, not spirally formed pipe, this is the teaching of the Handbook reference, this teaches away from the modification of the Cortec reference. The Handbook would suggest using structural plates instead of the spirally formed pipe of Cortec. The decision of the examiner must be reversed; which action the appellant now respectfully requests.

ARGUMENT REGARDING ISSUE 7.

Whether claims 5-9 are unpatentable under 35 U.S.C. § 103(a) over the "Handbook of Steel Drainage and Construction Products" in view of "PRD Cortec Housing Manufacturing System".

34. The Handbook reference as discussed before teaches of spirally formed pipes up to 120 inches, and it teaches of larger pipes up to 21 feet or more made from bolted together structural plate sections. The bolted plate sections are pre formed at the factory to include the curved sections necessary to produce an arch shape when bolted together, no reshaping is involved. The Cortec reference teaches that spirally formed pipes up to 15 feet in diameter are possible, but never suggests an arch shape in any way. There is no suggestion to combine these references, and it would require unsuggested modifications. It is also clear that the references teach away from the combination. It is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp,* 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F. 2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.) cert. denied, 488 U.S. 825 (1988).

35. The examiner's final rejection, page 14, second paragraph, suggests it is unclear in the Handbook, whether spirally formed pipes can be produced above 96 inches in diameter, then

proclaims that the reference "clearly" teaches that "pipes" can have diameters larger than 144 inches prior to reshaping. *No such teaching is found within the reference*. As discussed before, the Handbook reference does not provide any information regarding reshaping or flattening of pipes. The only "pipes" mentioned within the Handbook reference that are larger that 120 inches in diameter are produced from structural plate sections bolted together to result in the shapes desired. The examiner's misleading statement about pipes larger than 144 inches in diameter, is followed with the acknowledgment, "it's just not set forth that such were possible for spirally formed pipe". Therefore, it is apparent that even with the distraction of a misleading statement, unsuggested modifications would be required for the reference to teach what the examiner has asserted. The examiner does not provide a reason for the modification, but just restates the existence of "96 inches and larger" spirally formed pipes, then reminds us that the pipe in Cortec may be made up to 15 feet in diameter, without further explanation. In other words, the examiner has not provided a reason why one of ordinary skill in the art would have been led to modify the prior art reference or to combine reference teachings to arrive at the claimed invention. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure". In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). A broad conclusory statement regarding the obviousness of modifying a reference, standing alone is not "evidence". E.g., McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993). In the absence of some teaching found within the reference, the examiner's rejection is based on nothing more than the examiner's own broad conclusory statements.

36. It should be noted that the examiner has not addressed the appellants' arguments regarding, *unsuggested modification*, *unsuggested combination*, and that the references *teach away* from the suggested combination and/or modification. The decision of the examiner must be reversed, which action the appellant now respectfully requests.

ARGUMENT REGARDING ISSUE 8.

Whether claims 1-9 are unpatentable under 35 U.S.C. § 103(a) over the "Handbook of Steel Drainage and Construction Products" in view of "McFatter".

37. The Handbook reference, as discussed before teaches of spirally formed pipes up to 120 inches, and it teaches of larger pipes up to 21 feet or more made from bolted together structural plate sections. The bolted plate sections are pre formed at the factory to include the curved sections necessary to produce a variety of shapes. The modifying reference of McFatter, is an apparatus patent titled, "Storage Tank Construction Procedures", it refers to the McDonald patent, column 1, lines 13-15, as an example of "one such method of producing a storage tank". Upon closer examination of the reference, it is apparent that the invention of McFatter offers a new weld seam, and an alternate top structure for the tank. A completed tank structure is not disclosed and the overall purpose of the patent is focused on the apparatus claimed. Both references are *individually complete*, the Handbook reference, teaches of steel drainage and highway construction products, and the McFatter patent teaches of an apparatus to produce

storage tanks, neither reference provides a teaching to combine the references, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp,* 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F. 2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.) cert. denied, 488 U.S. 825 (1988). The examiner has not provided a motivation to combine the references. The Federal Circuit states that "(the) mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggested the desirability of the modification". In re Fitch, 972 F.2d 1260, 1266 n.4, 23 USPQ2d 1780, 1783-84 n.4 (Fed. Cir. 1992), citing In re Gordon, 773 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

38. The examiner's final rejection, page 14, last two sentences, continuing on to page 15, first paragraph, is directed to an assertion made by the appellant that the rejection did not mention the arching of pipes, that it was unclear how the rejection would be applied to claims 5-9. It would seem that the examiner is suggesting that the rejection is contingent upon earlier rejections and arguments. The rejection is, therefore invalid as it pertains to claims 5-9. The examiner does not provide a reason why one skilled in the art would be led to combine the teachings. The examiner simply implies that the Handbook reference teaches all of the claimed structure above 96 inches,

then proclaims that McFatter reference provides the teaching to increase the Handbook pipes up to 31' in diameter. It is as the examiner states, the "redefining of the references for clarity" that provides the teaching for such a combination. The rejection is based on nothing more than the examiner's own broad conclusory statement. A broad conclusory statement regarding the obviousness of modifying a reference, standing alone is not "evidence". E.g., McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact."; In re Sichert 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977).

39. The examiner's final rejection, page 15, second paragraph, starts off suggesting that it is an answer to arguments presented on page 15 of amendment C, but it is actually an attempt on the examiner's part to teach equivalencies of manufacturing processes, and articles produced by such processes. The Handbook reference does not provide any teaching regarding how spirally formed pipes are produced, the examiner has made no effort to research spiral pipe manufacturing processes, to compare those teachings with the teachings of McFatter, to determine if there is a fact based way to illustrate that these processes are equal. It is impossible for the examiner to support the teaching of equivalencies without providing authoritative support for that position. The rejection is based on nothing more than the examiner's own statement. A broad conclusory statement regarding the obviousness of modifying a reference, standing alone is not "evidence". Please refer to cites from argument 38 above. The teaching of equivalencies is apparently the examiner's theory to support a motivation to combine the references, but it is not supported by the references. It is simply the examiner's own words, supported by the examiner's own words.

The examiner asserts, that the appellant "has demonstrated in figure 1 of the instant application that one skilled in the art of forming sheet spirally into objects can use this technology to form buildings, silos, tanks, culverts, and pipes", and then implies that "others would be equally skilled enough to understand the equivalence of the prior art and expect success". This clearly demonstrates that the examiner is relying on the appellants' disclosure, to develop the motivation to combine the references and to present that there would be an expectation of success. MPEP -- SECTION-- 706.02 "the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure". In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The examiner has not provided a suggestion of the desirability of doing what the inventor has done apart from teachings found in the appellants' disclosure. The decision of the examiner must be reversed; which action the appellant now respectfully requests.

40. The examiner may have been attempting to address arguments regarding, *unsuggested modification* and *unsuggested combination*, but the examiner did not address the argument that the references *teach away* from the suggested combination and/or modification. The decision of the examiner must be reversed, which action the appellant now respectfully requests.

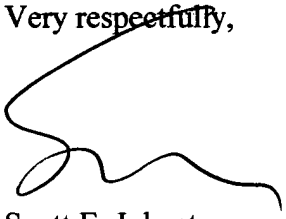
41. With all of the discussion related to erroneous equivalencies of manufacturing processes, it is important to note that the appellant has recently received patent 6,000,261 for a Portable Spiral Pipe Manufacturing System and 6,260,403 for a Large Diameter Arching Machine, both of which

are necessary to produce the appellants' Large Diameter Spirally Formed Pipe. The examiner has been made aware of this on numerous occasions. The decision of the examiner must be reversed.

CONCLUSION

The appellants application should have been passed on to allowance following the previous board of appeals decision. Had an impartial review of the examiners decision to reopen prosecution taken place, the patent would have issued by now. It is clear that the examiners rejections are faulty. Additionally, it seems that the examiner was attempting to overwhelm the appellant by offering multiple rejections, when if valid, only a few would have been needed. As an Applicant Pro Se and now as the Appellant, I am very concerned that I receive this patent on Large Diameter Spirally Formed Pipe. Please accept this appeal, and Reverse the Examiner.

Very respectfully,



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Certificate of Mailing: I certify that on the date below this document and referenced attachments, if any, will be deposited with the U.S. Postal Service as first class mail in an envelope addressed to: "ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231."

[redacted] 4-19-03

Scott E. Johnston, Applicant/Appellant

APPENDIX

Claims: I claim:

1. A spirally formed pipe, comprising an elongated strip of ductile material formed into joined, adjacent helical convolutions, having a diameter larger than 15 feet.

2. The pipe according to claim 1 further comprising that said convolutions form the wall of said pipe, and that said wall may be smooth, corrugated, or profiled.

3. The combination of claim 2 further including that said wall may be smooth, corrugated, or profiled with increased dimensional proportions as pipe size is increased.

4. The pipe according to claim 1 further comprising that said joined adjacent helical convolutions includes welded and or lock seam joining of said ductile material.

5. A spirally formed pipe, comprising an elongated strip of ductile material formed into joined, adjacent helical convolutions, reshaped into an arch shape, having a beginning diameter above 144 inches.

6. The pipe according to claim 5 further comprising that said convolutions form the wall of said pipe, and that said wall may be smooth, corrugated, or profiled.

7. The combination of claim 6 further including that said wall may be smooth, corrugated, or profiled with increased dimensional proportions as pipe size is increased.

8. The pipe according to claim 5 further comprising that said joined adjacent helical convolutions includes welded and or lock seam joining of said ductile material.

9. A spirally formed pipe larger than 144 inches in diameter before reshaping into an arch shape.